# RECORDS # PAST

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## **NOVEMBER-DECEMBER 1912**

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# A RESEARCH JOURNEY TO THE "ROUND" OF THE JORDAN

HE old Canaanites seem to have called the broad part of the Jordan valley, now known as the Plain of Jericho, the "round" of the Jordan. This name was taken up by the Hebrew writer and used in the description found in Genesis XIII, 10, "And Lot lifted up his eyes, and beheld all the Plain of Jordan, that it was well watered everywhere." Like so many of the descriptive words of primitive languages this was a very picturesque appellation. This part of the valley is not, in fact, round, but the cliffs on the right hand and on the left far up the river seem to draw together in the distance, and when the golden purple haze of the Orient hangs over this valley, which is a good deal of the time, it flings a curtain right across the Sea from Jebel Usdum on the east to Engedi on the west: thus cut off above and below, the valley seems an enclosed place and the illusion to which the Canaanites gave the name, the "round," is very complete.

This "round" of the Jordan is a romantic place, a sort of fabled realm of the archæologist's world. It encloses within its charmed circle of the hills of Benjamin and Judah and the wall of Moab and the coast of the Dead Sea, as well as touches round about the outside of its circumference, some of the most interesting and mysterious things of Bible history, and many more things, and more mysterious also, of Canaanite history which are forever lost. What is still more interesting to us is that the mysteries are still in the making. The ancient forces are still at work there. Strange



FIG. 1. A LOOK BACK ON THE WAY DOWN TO THE JORDAN  ${\it Photo \ by \ the \ author}$ 

things are taking place right under the sharp scrutiny of scientific research. At a recent visit, after an absence of 20 years from the attractions of this little central spot of all the world, the Holy Land, I found some startling changes had been going on and were still in progress. A look from afar off, from the look-out on the summit of Olivet, under the direction of a dweller in the land, had given a glimpse of what was going on and whetted my already keen appetite for the research journey I am about to describe.

It was the 12th of April, 1912. They assured us at Jerusalem that the east wind, that dreaded devouring monster of the Plain of Jericho, certainly would not blow for two days. (A few days later it sent the mercury up to 116° F.) So the early morning found us going "down to Jericho." Strange to say, one of the chief interests of this "going down" is looking back. The mountain over the Holy City seems to rise ever higher and higher into the heavens. The view (Fig. 1) that is most remarkable on the way is that from the Inn of the Good Samaritan, which, like all these Oriental khans, is just where an inn ought to be and probably where it has always been. A good glass upon the picture may reveal the Russian look-out tower on the summit of Olivet.

The "round" is not wholly dependent upon the Jordan for its fresh water supply. It is the natural drainage basin for perennial streams from the surrounding mountains. Even the barren hill country of Judea, "the wilderness of Judea," sends down its copious, noisy Brook Cherith. I have seen it stated in an historical geography of Palestine that this was only a winter torrent. If so, it could not have been the place of Elijah's concealment. For he was sent there in a time of drouth which must, at the earliest, have been about a year after the last rains, as no dearth is ever said to exist here until the time for the annual rains has first come



FIG. 2. THE GORGE OF THE BROOK CHERITH

Photo by the author

without the coming of the rains. I turned aside twice to examine this Brook; first, at the place above the deepest gorge, the place from which the picture (Fig. 2) was taken, and a second time I descended almost to the water at the lower part of the great gorge, and found a furious torrent of water thus late in April, though the hills above were already parched and bare. There was not the slightest suspicion of a winter torrent here. Twenty years ago I saw the Brook in October or early in November and, as I remember it, there was even then at the close of the dry season, a copious stream of water running across the Plain.

But the "Descender" is the great source of water for this Plain. The whole "round" might be turned into a tropical paradise, if it were not for the incompetency of the government and the inertia—that is the word exactly—the indisposition to move, the chronic "stand-patism" of the people. This beautiful river of sweet water (Fig. 3) is pouring enough every day into the grave of waters five miles below to water a province, and the phenomenal fall of the river toward the Dead Sea makes irrigation a very simple problem here.

The Zor of the Jordan, *i. e.*, its thicket is one of its most interesting phenomena. The underbrush from which it took its name is incidental and of no concern to us. But the opportunity for it and the hummocks along the edge of this region (Fig. 4) are very suggestive. This region is the delta of the Jordan. These hummocks are mute witnesses of some of the strange changes in water levels and the accumulation and cutting away of detritus. This presents a complex problem which only a geologist, a still more antiquated character than an archæologist, is competent to explain fully. But some changes here are plain enough. Evidently there was a time when far less detritus had been deposited at the mouth



FIG. 3. THE "DESCENDER" ABOUT FIVE MILES FROM THE DEAD SEA

Photo by the author

of the Jordan and the Sea extended much farther to the North keeping along by these hummocks through all this great triangular space which extends 7 or 8 miles up from the present shore of the Sea. Then there was also at the southern end of the Sea, far away in the distance, where the land seems still to extend out somewhat into the water, the "tongue" that almost cut off the Sea at that part. Gradually the upper end of the Sea was filled in by the growing delta of the river. The surface of the water was thus reduced in area and so the evaporation of the water diminished. To restore the equilibrium between the inflow and the evaporation the Sea began to rise and quickly flowed over the "tongue" and filled the large area of rich plain at the southern end of the Sea. The greatly increased evaporation, of course, stayed the rising of the sea. This condition lasted from the covering of the cities of the Plain, as some believe. down until recent times. All the while the "Descender" was bringing down its yearly contribution of detritus and dumping it into the upper end of the Sea. Gradually the shore line was pushed out into the Sea far below where it now is and the lower plain was here much larger than now, but as the Sea could go no farther south, the only way it could keep an equilibrium between the inflow and the evaporation was by rising to gain thus a little in area all around its surface. Thus some years ago, some say 50 years ago, it began slowly to rise again. Within the last 20 vears the rise has been quite rapid. When last here I saw an island in the Sea some rods out from the northern shore. A Jerusalem resident tells me now that as late as 15 years ago he was one of a picnic party on that island. Today it is under water and the boats are rowed over the place where it was. Then the eastern shore had a path along the rocks near the mouth of the Arnon. Now the path has wholly disappeared under 4 ft. of water. Stumps of large trees which once stood along the



FIG. 5. AN ISLAND IN THE MAKING

Photo by the author



FIG. 4. THE DELTA OF THE JORDAN

Photo by the author

shore on that side may now be seen under the waves. This process of restoring the equilibrium is still going on. This lake (Fig. 5), really an inlet from the Sea, was visible from the summit of Olivet 20 miles away. The water has made its way around one end of the higher ground between the lake and the Sea and very soon, perhaps by another year, it will have cut off this part of the delta and taken it under the Sea. We see a lake just made and an island in the making. Thus the bringing down of débris by the Jordan and dumping it into the Sea is actually at this time bringing the Sea farther north by causing it to rise in order to get sufficient surface for evaporation. These land changes and water levels thus present us the curious paradox that the larger the delta of the Jordan grows the smaller it becomes. By the rise of the water more and more of it disappears under the Sea.

It is rather hazardous to draw conclusions from these facts, or indeed from any facts, concerning the vexed question of the location of the Cities of the Plain. But I will risk saying that it seems to me that they cannot have been at this upper end of the Sea because the "tongue" most certainly existed in that day. While the "tongue" existed the Sea still occupied the place of this large delta, so that the cities, if at this end of the Sea, must have been on higher ground where their ruins would still most probably be visible. If, as I think, they stood at the southern end of the Sea, then the formation of this delta which forced the water out over the "tongue" to occupy the plain beyond submerged the ruins of the Cities of the Plain and they are there concealed under the waters of the Dead Sea to this day.

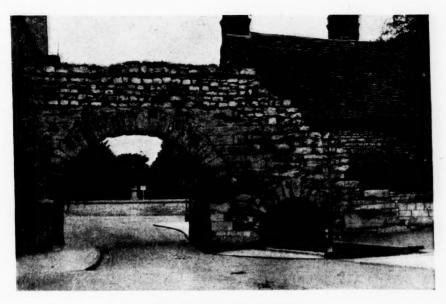
M. G. KYLE.

Philadelphia, Pa.

## 4 4 4

WORK OF EGYPT EXPLORATION FUND.—At Abydos last season the chief work, under Prof. E. Naville and Mr. T. E. Peet, of the Egypt Exploration Fund, was the excavation of the subterranean building, the Osireion. This may have been connected with the workshop of Osiris, or it may be a cenotaph of king Merenptah, who is represented on one of the walls as passing the various gatekeepers of the Underworld and entering the Hall of the Thirty-six Witnesses. He is also represented playing a game similar to chess. A grave stela of the Middle Kingdom bears the prayer that "a gentle breeze from the north may waft the dead man to his new home."

Explorations were also carried on by the Egypt Exploration Fund in a cemetery of the Ptolemaic age at Shaft-el-Garbieh. Mummies with gold plated masks were found. The mummies were all in limestone coffins with the lids cemented down. "A number of diminutive carved figures, each carrying a hoe with a basket slung over the shoulder, were found. It was customary to put a box full of these curious figures at the foot of the coffin. They were supposed to be servants who would save the dead person manual labor in the next world."



ROMAN ARCH AT LINCOLN

#### THE OLD CITY OF LINCOLN

S WE were "cathedral-hunting" we were especially desirous of visiting this ancient city, built on Roman foundations, and so well-known today both for its history and its architecture. "The glory of Lincoln" is certainly a fitting characterization of one of the very noblest of England's great cathedrals. In all its splendor it called me even in my dreams, and roused me from a comfortable Sundaymorning's sleep to gaze in a kind of waking dream upon its almost celestial beauty and majesty. Arriving at Lincoln in a depressingly heavy rainstorm, one must perforce neglect for the time this wonder of architecture which so dominates the city, and which is for so many miles such a conspicuous object upon the traveler's horizon; but Lincoln Cathedral, seen through the pale bluish haze and then the radiant rose-color of the sunrise of the morning following, was irresistible. The great cathedral, crowning its lofty height, lifted its towers so nobly into the pure air, and, seen from our hotel windows with the rugged Saxon belfry of the church of St. Mary-le-Wigford in the immediate foreground, made altogether so perfect a picture, so exquisite a vision, that I am sure it can never fade from my memory. In that quiet Sabbath-morning hour one could only think with reverence of another City: "the holy Jerusalem, descending out of heaven from God, and having the glory of God." Lincoln Cathedral, once seen, cannot easily be forgotten. Predominantly Early English in its style of architecture, of a type so varied and of a beauty so charming as to make it one of the best examples of the inception of Gothic in England, this cathedral is, however, at first most impressive in its entirety; one is oblivious for the time being of details, and is conscious only of the

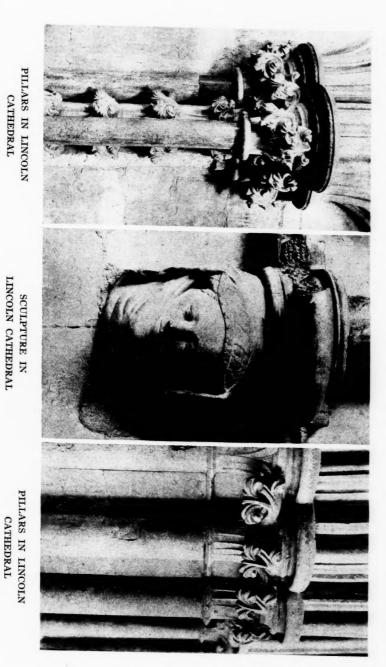
cathedral's vastness, of its towering sublimity.

The city of Lincoln has a proud place of its own in the records of England. The historian Freeman most enthusiastically (and with reason) tells us of its past, but in order to understand more fully Roman and mediæval Lincoln one must study at first hand the art and architecture of the city, or examine the treasures of by-gone centuries which chance or patient investigation have here yielded up, for these can tell the story of ancient

Lincoln more fully and convincingly than any possible words.

The Newport Gate, for instance, Lincoln's Roman archway, enduring almost by a miracle, for Roman structures in England so almost universally fell at the hands of the ruthless Saxon invaders or were turned to other uses-this Newport Gate stands unique in England as a memorial to the Roman occupancy. Deeply buried as its foundations have become during the course of so many centuries, the great stones of which the massive arch is constructed still stand so firmly in place that there seems comparatively little sign of their destruction and decay. Through this ancient archway Ermine Street, one of 5 great Roman roads converging at Lincoln, ran due north and south, and it is easy to imagine here the proud marching of Roman legions when Lindum Colonia, a most important city, stood in all its ancient splendor. During the Roman occupation, through the long night of the Dark Ages, throughout the mediæval period and down into modern times this Roman gateway has stood and bids fair to stand for many a year to come. What stories it could tell of the far-away past! Professor Freeman has called attention to the rather unimpressive size of this Newport Gate, but surely that marvellously-conquering genius, which did not falter before such an undertaking as the building of Hadrian's Wall, has no cause for reproach in the presence of this strong and simple archway. The wonder rather is how on the very outskirts of the great empire such monumental structures and feats of engineering were attempted at all. Only Roman determination, indomitably refusing to consider obstacles, could make such work possible.

Archæologists have carefully traced the boundaries of this early Roman city. Built upon a steeply-sloping height, as all who visit Lincoln will have cause to remember, and nearer to the brow of the hill than the earlier British settlement, the cathedral and the imposing Norman castle of the Conqueror's time stand within the ancient limits of the Roman town. This Roman city, rectangular in shape and surrounded by massive walls of which traces still remain, had 4 great gates. Of these the names of two streets indicate the position of the eastern and western entrances; the south gate was destroyed in the early part of the XVIII century, while the above-mentioned Newport Gate still marks the early city's northern boundary. The very name of this ancient settlement is of remarkable interest. Professor Freeman tells us that German Cologne and English Lincoln, both important cities of antiquity, have one and the same derivation, both being Roman "Colonies," while another writer says: "Lincoln' is 'Lindum Colonia:' the latter word dates from the Roman occupation



of Britain, and is sufficient to show the importance of the city at such an early period; the former carries us back further still to the times of the ancient Britons, whose dwelling on the 'dun' or hill, was named 'Llindun,' from the 'llin' or mere at its foot. The hill is that on which the minster now stands, and the mere still survives in the harbor of Brayford."

Lincoln is rich also in mediæval architecture. While England has lost practically all its Saxon buildings, only fragments, as a rule, remaining, Lincoln, on the other hand, can boast of two fine and undeniably Saxon church-towers, whose history however has been much disputed, while the St. Mary's Guild house, sometimes called "John of Gaunt's Stables," in the lower town, and the "Jews' House" in the old part of the city are most unique and deservedly well-known specimens of Norman domestic architecture. The Jews indeed formed a large settlement in mediæval Lincoln, and Chaucer, in his "Prioress' Tale" shows how great was the prejudice against them in his day in his narration of the story of Little St. Hugh:

O yonge Hugh of Lincoln, sleyn also With cursed Iews, as it is notable, For it nis but a litel whyle ago.

Whether the Jews of mediæval Lincoln were guilty of the crucifixion of a Christian child or not, the legend was widespread, and no doubt such stories, frequently repeated in mediæval times, served to increase the great animosity felt toward this persecuted race. The shrine of this martyred child, the Little St. Hugh, demolished in the Civil Wars and recently restored, is in the south aisle of the cathedral, as is also the burial-place of the famous

early chronicler Henry of Huntingdon.

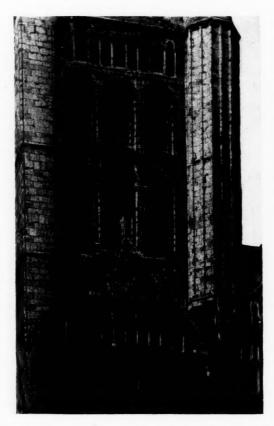
Lincoln Cathedral has a venerable history. Paulinus, the Saxon bishop of York, "preached in the old hill-town of Lincoln" and a church was established here about 628 A. D., but Lincoln was not to become the head of the diocese until the lapse of several centuries. The little village of Stow, some few miles distant, and later Dorchester-on-Thames held the preëminence in ecclesiastical affairs in this portion of England until the coming of the Normans. Then "the most illustrious" city of Lincoln began to be considered a more suitable place for a great bishopric, and Henry of Huntingdon tells how Remigius, the first Norman bishop, purchased in Lincoln "certain lands on the highest parts of the city, near the castle standing aloft with its strong towers, and built a church strong as the place was strong, and fair as the place was fair, dedicated to the Virgin of Virgins, which should both be a joy to the servants of God, and, as befitted the time, unconquerable by enemies." A modern writer says: "Lincoln thus became the center of a diocese comprising an enormous area, including the 10 following counties:—Lincoln, Northampton, Rutland, Leicester, Cambridge, Huntingdon, Bedford, Buckingham, Oxford and Hertford. In the strong city beneath the massive walls of William's castle, Remigius could build in safety, not hindered, as his predecessors had been, by the fear of fierce invaders from across the sea." Of the Conqueror's above-mentioned castle it is sufficient to say that some portions of the original structure remain and are of great interest, although most of the



EARLY NORMAN WORK ON WEST FRONT OF LINCOLN CATHEDRAL



CARVINGS IN LINCOLN CATHEDRAL



DETAIL OF ONE OF THE WESTERN TOWERS, LINCOLN CATHEDRAL

present buildings composing the whole are the work of later centuries. In the terrible wars between Stephen and Matilda it is said that the followers of the latter seized the strong castle, while Stephen dared to fortify and occupy the cathedral, thus increasing his later misfortunes, or so we are told by William of Malmesbury. Vastly interesting memorials of this fierce Norman period are the carvings upon the lower portions of the cathedral's stately western façade. Unusually rich and elaborate as some of the later Norman work upon this western front appears, the earliest carvings, brought, it is said, during the time of Remigius from the church at Dorchester, the former see, have all the rudeness and grimness of a stern and bloodthirsty age, an age in which grace and beauty played as yet a very small part, and where war and its concerns were paramount. Only a comparatively lawless period in history could produce such sculpture.

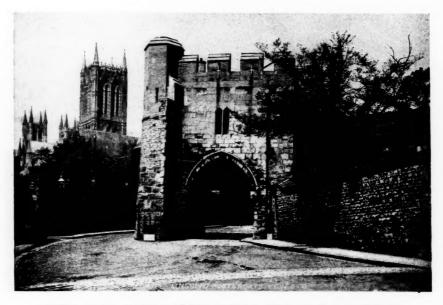
Lincoln Cathedral, made still more famous by several great bishops, foremost among these being the learned and fearless Bishop Grosseteste, represents in the main the architectural genius of two of the Norman prelates of the XI and XII centuries, while the beautiful Decorated Angel



SAXON DOORWAY (PARTIALLY RESTORED) OF THE CHURCH OF ST. PETER-AT-GOWT'S

Choir, as well as much other fine work, is of the XIII century. Above all, however, Lincoln Cathedral claims as its distinction the late XII century construction of St. Hugh of Avalon. This deservedly-famous man evolved in his rebuilding of the cathedral, which work became necessary after a great earthquake here, "the earliest dated example of pure Gothic architecture, without any trace of transitional feeling; the first perfect development of what is known as the Early English style." Professor Freeman says in substantially the same words that the taste of the architect "did nothing less than develop on the soil of Lindesey the first complete and pure form of the third great form of architecture, the architecture of the pointed arch." The "stiff-leaved foliage" and beautiful arcades representing St. Hugh's work can be studied at leisure by the traveler in the choir of the cathedral. At the death of this sainted and greatly-loved bishop the beautiful old legend tells us that

A' the bells o' merrie Lincoln Without men's hands were rung,



POTTER GATE, LINCOLN, WITH DISTANT VIEW OF THE CATHEDRAL

And a' the books o' merrie Lincoln Were read without man's tongue; And ne'er was such a burial Sin' Adam's days begun.

But the work of the builders of Lincoln Cathedral must be studied in detail to be appreciated, such a masterpiece, such a treasure of art should be studied with one's own eyes. Nathaniel Hawthorne wrote concerning it: "It is vain to attempt a description, or seek even to record the feeling which the edifice inspires. It does not impress the beholder as an inanimate object, but as something that has a vast, quiet, long-enduring life of its own—a creation which man did not build, though in some way or other it is connected with him, and kindred to human nature."

Space will not permit a description of modern Lincoln, a busy and prosperous city; the merest mention must suffice of the famous mediæval gates of the town, such as Stonebow, Potter Gate and Exchequer Gate; even the old Bridge Inn, a XVI century structure which is so absolutely charming in its style of architecture, so strikingly picturesque in line and color that it seems too beautiful to be real; the "Glory Hole" in the rear of this building; the old house of the White Friars, hidden now among a mass of later buildings; the old houses near the cathedral; the delightful walk up the "Greestone Stairs" and then around the cathedral's irregular old monastic walls, where at one point upon the rough and monotonous surface of this wall some mediæval craftsman of whimsical humor and gentle sarcasm carved long ago a cowled and boldly-projecting female head which looks with most amusing inquisitiveness down the street and upon the

passersby—all these as well as many another fascinating bit of antiquity can here only be glanced at, for mere words fail to do them justice. Lincoln, that "proud steep on which castle and minster reign side by side," a city representing the prosperity and the busy life of so many centuries, well rewards the time and study of the traveler, and every hour spent in such study in this ancient and historic town will only serve to increase one's wonder and delight. I cannot resist closing this incomplete survey of the grand old city with the glowing words again of Professor Freeman:

"York and Chester themselves may yield to the charm of the long history of the height crowned by the Colony of Lindum, the home of Briton, Roman, Englishman, Dane, and Norman; its walls, its houses, its castle, and its minster, bearing the living impress of its successive conquerors; where on the height we call up the memory of those ancient Lawmen, those proud patricians who once bade fair to place Lincoln alongside of Bern and Venice, and where, in the plain below, a higher interest is kindled by the stern yet graceful towers which tell us how Englishmen, in the days of England's bondage, could still go on, with the Norman minster and castle rising above their heads, building according to the ruder models of the days of England's freedom."

ADELAIDE CURTISS.

Fishkill-On-Hudson, N. Y.

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### THE CAYUGA CHIEF, DOCTOR PETER WILSON

FEW dates, brief mention in state documents, many petitions in behalf of his people, perpetuate the memory of the Cayuga chief whose name heads this sketch. Fifty years ago Dr. Peter Wilson as Cayuga chief from 1839 until about 1872,

when he died, was a well known figure in Albany lobbies.

Through his father he was related to the celebrated Seneca chieftain Young King, who was born in 1760, and was a member of the Turtle clan. Young King participated in the wars of Brant in 1778, being then only 18 years of age, yet a fierce and mighty warrior from the first, who fought under the British leader at the Valley of Wyoming, after which he was made a colonel in the King's army. In 1812, while residing at Buffalo, he enlisted again, this time fighting on the side of the United States, and made a striking appearance by his colossal size and single arm. He died in 1835, and his son must have been the father of Dr. Wilson. Young King's Indian name was Gui-en-gwah-toh, meaning "Bearer of the Smoking Brand," and he was a nephew of Old King, a noted ruler of the Seneca nation. The latter was a descendant of Sayenqueraghta, translated "Smoke has Disappeared," king of Kanadesaga in the days of Queen Anne of England. Young King married Martha or Polly, and his son married

a Cayuga woman from Grand River, who joined the mission church at

Buffalo Creek in 1834.

Her son, Peter Wilson, was said in 1850 to have been about 40 years old, therefore he was born about 1810, or at least in the opening years of the century. He was living in Buffalo in 1838, and was graduated from Hamilton College before 1840. In 1839 he became chief of the United States Cayuga by the resignation of William King, who went west with the Sandusky (Ohio) Cayuga into Kansas, and later to Indian Territory. Wilson visited Canada to ascertain the annuity claims of the tribe living there, and was deeply interested in the attempts made to reimburse the Cayuga of New York, for the lands with which they parted in 1789 and 1795 for a small annuity, and which were sold for a much larger sum by the New York state government. He drew up a law of inheritance for his tribe, and with N. T. Strong, a Seneca, was instrumental in petitioning for relief, for schools and for settlement of land disputes.

One particular circumstance shows the respect in which he was held. During various examinations held in regard to Indian claims, Dr. Wilson made the statement that in 1840 a council of the United States and Canadian Cayuga was held, at which the Canadian portion agreed to lay aside forever their claims to annuity. This is reported in New York state senate documents 58 for 1890 on page 249, and 20 for 1899 on page 15. Such a statement though unsupported, and questioned by his enemies, was regarded sufficiently proven by the known character of Dr. Wilson, and the

New York state authorities refused to disbelieve his testimony.

In 1846, however, another danger arose from the rapacity of the Ogden Land Company, whose preëmption title to Seneca lands made them desire to drive away the Indians. A council held June 2, 1846, at Cattaraugus. by the various Iroquois tribes, did not put an end to the efforts of Dr. Abraham Hogeboom, who persuaded nearly 200 Indians to go westward with him, among these nomads being 38 Cayuga. Conditions had so changed in the west from aboriginal times that 61 out of this number died by the time the band reached St. Louis, and the remainder were in a famishing condition. Dr. Wilson petitioned the Land Office in 1846, and in May, 1847, spoke eloquently before the New York Historical Society, a speech quoted by L. H. Morgan. In reply to a petition of Maris B. Pierce, March 24, 1847, the state legislature voted \$2000, and Wilson was sent west to bring back his tribesmen. Thirty-three preferred to remain, among them William King, the previous chieftain. Dr. Wilson brought back 25, making a total of 58 survivors, out of the 538 Cayuga who emigrated in 1831 and 1846.

Dr. Wilson's medical knowledge and courage are said to have been tested in the United States service as surgeon, possibly in the Mexican war, or else some of the Indian wars, for his widow was a pensioner and was buried at government expense. This is stated by the Rev. William D. Manross

of Onondaga reservation, New York.

We owe to Dr. Wilson reports on Cayuga councils held in 1812, 1829, 1831, 1840 and 1846. His speech, not delivered before the land office in 1850, is reported in senate document number 58, 1890, pages 237-250, and

another eloquent appeal is preserved in another document of the senate, number 64 for 1849. He is mentioned in the *Dearborn Journals*, in the Buffalo Historical Society's *Transactions*, Volume VII, under date of 1838, as a Seneca chief.

His memorial to the New York state senate, March 16, 1853, gives his Cayuga name of Wa-o-wa-na-onk; or, in another place, with an extra syllable, Wa-wa-o-wa-na-onk. He was one of the founders and the secretary of the Iroquois Agricultural Society in 1859. Its first annual fair was held October 23, 1860, due to his unflagging efforts in behalf of his people, and it was incorporated in 1863. Another memorial, February 21, 1861, to the New York senate, bears his signature De-jits-no-da-wah-hoh, or "Peace-maker," as Grand Sachem of the Six Nations, the supreme Iroquois title. Up to 1865 his name still appears on petitions. He died in the summer of 1872 at Cattaraugus, leaving as his widow, his second wife, a white woman. His first wife, a Cayuga, left two children, Maria and Rush S. Wilson. The latter represented the New York state Indians on various occasions, and is said to have been a fine man. He was a chief in 1890, and died in a house alone in 1904. There is also said to have been a John Wilson, a Seneca, living in 1890, possibly a relative of these men.

Maria Wilson married a Seneca, Oliver Jones, and had a son Charley Wilson, still living, and a daughter Lucy, and perhaps also Maria, unless these two daughters are one and the same. Lucy Wilson Jones married James Pierce (or according to a letter from the Rev. Dr. Wm. T. Beauchamp, she married Daniel Two-Guns), a Seneca chief, who left her, and married secondly an Onondaga woman, in order to gain control of property. According to the Seneca laws no Cayuga could hold property on their reservations, and probably the Onondaga law is the same as regards the reservations of that tribe. James Pierce may be a descendant of Maris B. Pierce, the Seneca associated with Dr. Peter Wilson in his efforts in behalf of the two tribes. Others of the family are Jairus Pierce, mentioned in document number 40 of the New York state assembly for 1906, on page 203, and the Pierce brothers noted as track runners, to whom Mrs. Converse refers.

Among Lucy Pierce's children is a son Ulysses, who has married a Seneca woman, and in whose home on Onondaga reservation his mother dwells happily, with her little grandchild Neresta.

Peter Wilson was a modern Hiawatha, whose labors in behalf of his nation and race have not received their proper appreciation in literature.

GRACE ELLIS TAFT.

New York City.

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THE LOGAN ELM

#### THE LOGAN ELM

T WAS a notable day in October, 1912, when the Historical Society of Pickaway County through its President, Miss May Lowe, presented to the State Archæological and Historical Society of Ohio the famous "Logan Elm," with several acres of surrounding land which had been purchased and put in presentable order by the enterprising citizens of Pickaway County. This elm in itself is one of the most remarkable in existence. Growing in the fertile plains of the Scioto Valley, with its roots penetrating to the perennial underflow of water in the gravels beneath, the tree has attained an enormous size, its branches spreading nearly 150 ft. It must have been a large tree when in August, 1774, the famous speech of the Mingo chieftain Logan was delivered under its branches to John Gibson, a messenger from Lord Dunmore, to inquire why Logan absented himself from the Peace Council which was in session not far away.

Logan was a son of the Cayuga chief Skikellimus, who lived in Shemokin, Pennsylvania, in 1742. The date of his son's birth is not definitely known. The name of Logan was given to him out of the father's respect for James Logan, the Secretary of the Province. Early in life Logan moved to Ohio and settled on the Ohio River at Mingo, not far from Wheeling. He took no part in the old French war, except as a peace maker, and was always a friend of the whites until the murder of his family and relatives by mem-

bers of Lord Dunmore's expedition, in the summer of 1774, at which time he had moved to the Pickaway plains in the valley of the Scioto, not far from Circleville, O. Logan attributed this massacre to Captain Cresap of Dunmore's command, who, later, took part in the Battle of Bunker Hill and shortly after died in New York City and was buried in Trinity Churchyard. On the occasion of the reception of the Logan Elm, already referred to, a descendant of Captain Cresap made a vigorous defence of his ancestor, claiming that Logan's charge was based on misinformation, and was false, Cresap being at the time of the massacre a hundred miles away.

The speech of Logan was given wide circulation by Thomas Jefferson. It was repeated throughout the North American Colonies as a lesson of eloquence in the schools, and copied upon the pages of literary journals in



CROWD AT THE PRESENTATION OF THE LOGAN ELM

Great Britain and the Continent. In the words of Henry Howe, "This brief effusion of mingled pride, courage and sorrow, elevated the character of the native American throughout the intelligent world; and the place where it was delivered can never be forgotten so long as touching eloquence is admired by men."

Following is the copy of the speech given in *Jefferson's Notes* on page 124: "I appeal to any white man to say, if ever he entered Logan's cabin hungry and I gave him not meat; if ever he came cold or naked and I gave him not clothing.

"During the course of the last long and bloody war, Logan remained in his tent an advocate for peace. Nay, such was my love for the whites, that those of my own country pointed at me as they passed by and said 'Logan is the friend of white men.' I had even thought to live with you, but for the injuries of one man. Colonel Cresap, the last spring, in cold blood, and unprovoked, cut off all the relatives of Logan; not sparing even my women and children. There runs not a drop of my blood in any human creature. This called on me for revenge. I have sought it. I have killed many. I have fully glutted my vengeance. For my country, I rejoice at the beams of peace. Yet, do not harbor the thought that mine is the joy of fear. Logan never felt fear. He will not turn on his heel to save his life. Who is there to mourn for Logan? Not one."

GEORGE FREDERICK WRIGHT.

Oberlin, Ohio.

# **4 4 4**

#### NOTES ON THE MIXTECA

LEFT Teotitlan Del Camino for the Mixteca to collect the ixtle and allied fiber plants. No special observations were made of the archæological remains, as their study was reserved for a subsequent trip that was never undertaken. So only an imperfect description,

almost wholly recollections, will be attempted.

Mention has previously been made of the ruins on the west bank of the Rio Salado. The most prominent places were selected for occupancy —the strategic value for defense being considered. On the banks of the Hiquila and Petlanco Rivers and on the precipitous banks of a dry gully on the Concepcion lands are to be seen stone walls of similar construction. The stone walls running parallel to the Hiquila occur at long intervals for some distance. It is possible they formed a continuous wall, the gaps being made by floods that carried the missing portions into the river. Their peculiar features are the small and generally flat stones used and the absence of mortar. To be more exact, there appears to have been some mortar, but as in the + shaped rooms of the Tecomavaca mounds, it may have disintegrated and become a kind of dust. On other small sections of a wall near Tecomavaca larger and more irregular stones were cemented together. These are apparently more modern walls, however, walls of loose stones and cemented walls are both common throughout Mexico. Judging from numbers of plates examined, cement was employed in many parts of Yucatan with which this section had intercourse.

Don Emilio Bolanos Cacho suggested to my father, to whom I referred the question, that they were canals; there is no doubt that irrigation was resorted to as it was evidently necessary for the population the country supported. Some small canals made of stone and covered inside with a sort of lime cement were seen in this vicinity. They are now almost covered with débris. Near Teotitlan there are several small walls 8 to 10 ft. long and 3 to 4 ft. thick, built across the dry arroyos on the hillsides for no other apparent purpose than to retain rocks and débris and check ero-

sion. But these walls have large stones. It seems strange, therefore, that in a canal running parallel to the Petlanco and Hiquila Rivers, small stones should have been employed, especially when the primitive tools of the natives are considered. The walls of the + shaped buildings near Tecomavaca were made with small flat stones, but they were comparatively inferior.

What metal tools the natives used is difficult to determine. The evi-

dence gathered is mainly circumstantial.

Mr. J. Cano, a merchant of Coitlahuaca, "Plain of Snakes," tells me that the Mixtecos tipped their arrows with iron, and in battle first discharged them, then followed with slings, and lastly used lances with "steel" (iron?) heads. It is certain that there was a good deal of intercourse among the different tribes; there is not only a strong similarity in the idols and jars, but certain implements of unknown use are exactly alike in widely separated sections. If in such immaterial things contact is shown, and if it can be established that iron or some natural alloy was used in some section, a general knowledge may be implied.

While cutting my way through a dense jungle, I picked up a shapeless piece of iron about the size of a fist. It must have attracted the notice of the aborigines, settled in the vicinity, and they would have been more likely to notice it than a traveler, on account of its color and specific gravity. It may have been produced or discovered elsewhere as there were no indications of iron where it was found. It may also have been a portion of a meteor as a large one containing much iron was seen on the

banks of the Salado River.

Copper celts found and the "tempered" copper knives of which Mr. J. Cano spoke may have been hardened by tin or may have been what is locally known as bronze. Large pieces of this ore, an alloy in its natural state so rich and of such specific gravity as to have attracted the attention of anyone, were seen in an outcrop on a river bank. This could easily have been used. That iron or some alloy was used can also be judged by considering the extent of the ruins. The blocks of limestone of the Mazatec ruins, while large, may have been cut with copper celts or stone hatchets, and the rough sides smoothed by rubbing as was probably done, with much labor. But it is doubtful if such tools could have made the perfectly carved idols of hardest stone even with the aid of obsidian, the ruins on both sides of the Rio Salado, Mixteca, the large pillars "monoliths" and blocks of stones used on the walls, and, if I remember correctly, the steps of Mitla. I say steps, but this may not be exactly what they are, since they are so narrow that they accommodate only about one-half the foot, and it is easier to ascend them sidewise than in a straight line as we do in a modern stairway; and they are nearly twice as high. In other ruins in southern Mexico, particularly Yucatan, as I note from plates, there is not such a marked difference. These peculiar steps may have been so constructed for a religious or other ceremony.

The notched post however, by which the granaries are entered and the steps cut in the steep hillsides were the earliest steps and may have been their parent, as what else could the builders have had in mind in preSpanish times? Then again, all or virtually all, the natives live in a country where it is hardly possible to go 300 ft. in a straight line. This, with the heavy burdens carried, has caused the disproportionate development of the calves, thighs, and in fact the entire lower portion of the body, as was once pointed out to me by my father W. J. Forsyth. Not only would they naturally make a higher step than a European but they would require a smaller foothold, even allowing for the shoes. Certainly the Mitla steps are not suited to a foreigner, as is clearly seen by the crablike and saltatory feats of the tourists who attempt their ascent. Be what they may, they may be referred to tentatively as steps.

Besides the extent of the ruins suggesting tools, of iron or some alloy, there is the fact that the natives were familiar with gold, silver, copper

and were otherwise advanced above a purely primitive people.

On the road from Tecomavaca to Coixtlahuaca one sees numerous house sites, and some distance therefrom on the same road a number of house ruins of which only the walls of irregular uncemented stones remain. There is some regularity in the position of the houses, allowance being made for narrow streets. These ruins are of comparative recent date, some of them may have been erected to accommodate travellers in recent time, but there may be some coeval with the stone kralls occasionally to be seen off the main roads. Some of the latter are still used and may be relatively

modern, though the successors of a more ancient structure.

It would not be surprising to find evidences of intrusive work anywhere near the valley, since it is the natural gateway of a large section of country which can be shown by historic references, and by the presence in the mounds and graves of Indian relics 700 to 800 years old, Spanish, French and different Mexican coins, and caves where bandits retreated after raiding caravans. Beads were seen varying in size from \( \frac{1}{4} \) in. to \( \text{i} \) in. in diameter, round and cylindrical. The latter are not worn on the side as most of the round beads are. The necklace, therefore, may have been fastened to the neck, hanging down either on the back or breast or both, with the round beads occupying the curves and the cylindrical beads the sides of the necklace. Some of the beads are of jade, granite of varying density, numerous other hard stones and glassy quartz or a composite stone that has been highly polished. There is a possibility that glass may have been known to these people. A number of very rare beads seen in the home of a merchant of Nochistlan showed a covering resembling glass and an inner bead of gold. A round face was cut on one of these "glass" beads that may have represented the moon. A round face is to be seen on the roof of the church of Coixtlahuaca, about 18 in. in diameter, and several idols are in niches in the walls. No opal objects were found though there is opal near Coixtlahuaca. Onyx was not used for any figurines or beads yet mines of this stone could have been known as there are several in operation in the State at the present time. The same collection of Nochistlan had a clay bowl upheld by legs about 4 in. long, but without the head terminating in a reptile head as the legs of similar bowls of Teotitlan, at least a similarity can be constructed from the fragments of the bowl attached to the legs.

As has been stated, the idols of northern Oaxaca are very much alike; the eyes are nearly all oblique, a few round eyes have an eyeball or rather what appears to be one, though it may not have been so intended. These imperfect eyeballs were made, by the drill being hollow. There is also a more general resemblance to the idols of Yucatan. They are made of gold, silver and the hardest rock generally white though some are of conglomerate which gives a perhaps unintentionally speckled appearance. It is further evident that much the same implements were employed in their manufacture. The two small holes at the back of the neck, in which a piece of metal may have been inserted to suspend the idol, are about  $\frac{1}{4}$  in. apart, though directed toward each other they seldom meet, but where they terminate a small cone rises, probably caused by the drill being hollow. The figurines of the Mixteca, Teotitlan and Mazatec region show nearly the same degree of skill, if we except certain crude implements from some caves in the rocky region of the Mazateca.

Around Coixtlahuaca, and in fact the entire district, there are deposits of dishes; some stone slabs partly buried on edge or a round ring of cement denoting their location. At a depth of 2 to 3 ft. one finds a small cellar containing usually clay dishes (in one chamber there were 78 clay dishes stacked in a straight pile) idols and other relics in vases or scattered about. Relics are also plowed up in the field by the laborers; they were washed from mounds and buried beneath the sediment of many floods.

There are several old maps in Coixtlahuaca; one with numerous painted hieroglyphs and another showing the villages of the ancient district of Coixtlahuaca. Some mounds are to be seen in the vicinity of the pueblo. Southeast of the village of Coixtlahuaca, at a distance of about 500 yds., there are the ruins of a palace of King Altonaltzin of Coixtlahuaca. The soil and climate to the west of the Rio Salado for several miles is the same as that of Teotitlan, but as one ascends toward the high tableland it becomes much cooler, and on the plateau there is often ice, so I am told; the soil conditions change and become better adapted to the maintenance of a large sedentary population.

Some of the sandals have a high heel piece, and according to information gathered locally were the same centuries ago. The high heel piece, it will be recalled, is common on the idols of Central America and Yucatan, and on the pictures of Lord Kingsborough, and other paintings of Indian warriors, a strap is sometimes wound several times around the leg, above the ankle. Sandals should be popular here as the roads are not of clay and slippery as they are in other places where the sandal is often removed so as to obtain a firmer foothold with the toes. Sandals with and without the high heel piece are more common near Oaxaca City. We visited the villages of Concepcion, Tepelmeme, Tequistepec, Teposcolula, Tamasulapaum, Nopala and Tlapiltepec' and others. The natives of Nopala were hostile and those of Tlapiltepec dangerous; owing to trouble in the latter village we returned to Teotitlan, thereafter making the last trip to Tamasulapaum.

L. N. Forsyth.

New Iberia, La.

<sup>&</sup>lt;sup>1</sup> Huarches and in the state of Chiaps known as Caites.



MOUSTERIAN IMPLEMENTS FROM LA COTTE DE ST. BRELADE, JERSEY

# EXCAVATION OF A CAVE CONTAINING MOUSTERIAN IMPLEMENTS NEAR LA COTTE DE ST. BRELADE, JERSEY<sup>1</sup>

HE cave known as La Cotte de St. Brelade was partially excavated by the Société Jersiaise in 1910 and 1911.<sup>2</sup> It penetrates the northern side of a ravine or cleft in the granite cliff, some 200 ft. in height, that forms the eastern horn of St. Brelade's Bay. The ravine in question, which is about 40 ft. across, has completely vertical walls to the north and south, whilst to the west it opens out towards the sea. To the east, however, the wall of live rock, which one may suspect to be nearly perpendicular, is masked by a steep talus of rubble and clay interspersed with blocks of granite, some of them of great size. This fall of "head" is much thicker on the southern than on the northern side of the ravine; and here the suspended blocks are especially insecure, so that whoever attacks the slope below stands in perpetual danger of sudden extinction.

When work was in progress at La Cotte de St. Brelade in 1910, it was noticed that there were slight indications of a buried cave on the opposite side of the ravine. In 1911, on the last day of excavation, a small portion of the talus was removed at this point, and there was exposed what appeared to be the top or lintel of a cave-entrance. At Easter, 1912, the present writers, one of whom is owner of the property, devoted several days of personal labor to the exploration of this cavity, and succeeded in clearing out a space about 8 ft. in penetration, 12 ft. in breadth and from 4 to 6 ft. high. Hereupon it was found necessary to put off further operations until the summer; but already 2 pieces of encouraging information had been acquired.

<sup>1</sup> Man, 1912, 93, November.

<sup>&</sup>lt;sup>2</sup> For descriptions of the human teeth and implements found here, in conjunction with the remains of a pleistocene fauna, see E. T. Nicolle and J. Sinel in Man, 1910, 102, and 1912, 88; R. R. Marett in Archaeologia, LXII, 449 f. and LXIII, 203 f.; A. Keith and F. H. S. Knowles in Journal of Anatomy and Physiology, October, 1911; and Bulletins de la Société Jersiaise, Nos. 36 and 37.

In the first place, a solitary flake of flint was discovered some 5 ft. down in the débris. Secondly, this cave, which faces north and is filled with a rock-rubbish almost free of any intermixture of clay, appeared, up to the limit of excavation, to be far drier than La Cotte de St. Brelade; so that it seemed probable that any bone found here would prove to be in better condition than the sadly decalcified remains yielded by the other site.

On August 14 excavation was renewed, this time with the help of skilled quarrymen. Several days were spent in clearing away the more insecure portions of overhanging "head" so as to minimise the risk of sudden falls. We then drove a trench inwards at a level slightly lower than that of the floor of occupation discovered at La Cotte de St. Brelade, our expectation being that in this respect the 2 caves would be found to



LA COTTE ST. BRELADE, JERSEY. NEW CAVE ON SOUTH OF RAVINE

correspond. This operation, however, which lasted until about the end of the month, was of no avail. The cave-filling remained uniformly sterile throughout. It then became necessary to made a second trench at a level 7 ft. lower, a tedious business since it involved cutting through the rubbish resulting from our previous working. On September 4 the mouth of the cave was reached, and on the following day fortune at length rewarded our efforts. About 2 ft. above the bottom of our trench were found 22 flint implements and flakes lying together just inside the western angle of the cave, where the rock forms a sort of pillar. They were embedded in a mass of darkish clay, the color of which was possibly due to an intermixture of ashes; but nothing that could be described as a regular hearth came to light.

Next day 13 more flakes, none of them deserving the title of implements, were discovered scattered about the sides of this same pillar at various

levels, all somewhat higher than that of the previous find.

Some 65 sq. ft. of surface were laid bare within the cave at this level, but no further traces of man occurred save 2 water-worn pebbles of granite about 3 in. in diameter that might prove suitable as hammer stones, but bore no marks of use; some very small pebbles of flint; and a few minute and indeterminable fragments of bone. Evidently we have not yet reached the hearth-floor, if such there be, but must seek still lower for it. We had, however, excavated to the utmost limits of safety, having removed some 250 tons of rubble, and reached a depth of 27 ft. as measured from the arch or lintel first uncovered.

The talus was now so steep that without considerable demolition of its higher portions we could not venture to remove certain large locks that barred our downward progress within the cave. Work was therefore suspended on September 9. We could congratulate ourselves on the fact that at any rate we had done enough to verify our hypothesis of a human occupation. Further, there could be no doubt as to the identity of the human occupants concerned. The implements bear a well-marked Mousterian facies, as Messrs. Breuil, Boule, Solas and Henry Balfour, to whom they have been shown, agree with us in holding. Of the specimens figured in the plate, one is a good and the other a moderate "point," several have the characteristic trimmed base, and the rest show either secondary chipping or marks of utilisation.

It remains to add that the discovery of a Mousterian occupation on both sides of the ravine raises the question whether the whole rearward portion of it now buried under masses of rubbish was not formerly one vast cave, of which the roof has since collapsed. A confirmatory fact is that on the northern side wall, as the plate shows, the rock is markedly less weathered as it approaches the talus. If so, there is all the more reason why despite the great trouble and expense involved, our efforts should not cease until the whole site has been cleared out.

The new cave had better be known for the present as La Cotte de St. Brelade II, since it may turn out to be but an annex of the other, connected

by a cavity that runs right round the back of the ravine.

We have much pleasure in putting on record our appreciation of the services of the contractor, Mr. Ernest Daghorn and his men, thanks to whose skill and courage we were able to carry out this dangerous excavation successfully and without accident.

R. R. MARETT, G. F. B. DE GRUCHY.

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# THE XIX INTERNATIONAL CONGRESS OF AMERICANISTS, 1914

N THE fall of 1911 a number of delegates to the past Congresses of the Americanists met in Washington, under the auspices of the Smithsonian Institution and the Anthropological Society of Washington, for the purpose of taking preliminary steps toward extending an invitation to the Congress at its London meeting, to hold its nineteenth session in 1914 at Washington. A temporary organizing committee was selected, consisting of Prof. W. H. Holmes, Chairman; Mr. F. W. Hodge; and Dr. A. Hrdlička, Secretary. This committee entered into communication with the principal local institutions and organizations which are interested in the work of the Americanists, and by May 1, 1912, a formal invitation to the Congress was agreed upon by the Smithsonian Institution, the Anthropological Society of Washington, the George Washington, Georgetown and Catholic Universities, and the Washington Society of the Archæological Institute of America. A list of names of persons to form the permanent Organizing Committee was agreed upon and Dr. Hrdlička was instructed to present the joint invitation with the list just mentioned to the council of the London meeting of the Americanists, which was done, and both were accepted without objection. In addition, an official invitation from the Bolivian government was accepted for a second session, to be held at La Paz following that in Washington.

On October 11, 1912, the permanent committee for the Washington session met in the U. S. National Museum for organization. Its membership is as follows: Messrs. Franklin Adams, Frank Baker, Chas. H. Butler, Mitchell Carroll, Charles W. Currier, A. J. Donlon, J. Walter Fewkes, Alice C. Fletcher, Gilbert H. Grosvenor, F. W. Hodge, H. L. Hodgkins, William H. Holmes, Walter Hough, Aleš Hrdlička, Gillard Hunt, J. F. Jameson, George M. Kober, D. S. Lamb, Chas. H. McCarthy, James Mooney, J. Dudley Morgan, Clarence F. Norment, Thomas J. Shahan, H. J. Shandelle, George R. Stetson, Chas. H. Stockton, J. R. Swanton,

Harry Van Dyke, Charles D. Walcott, and M. I. Weller.

The elections of officers resulted, in the main, as follows: For the Patron of the Congress, the President of the United States; President, Organizing Committee, W. H. Holmes, Head Curator, Department of Anthropology, U. S. National Musuem; Secretary, A. Hrdlička, Curator, Division Physical Anthropology, U. S. National Museum; Auxiliary Secretaries, Dr. Chas. W. Currier; F. Neumann; Treasurer, C. F. Norment, President, The National Bank of Washington; Head of General (honorary) Committee, Mr. Charles D. Walcott, Secretary, Smithsonian Institution; Committee on Finance, Dr. George M. Kober; Committee on Arrangements and Entertainment, Prof. Mitchell Carroll, General Secretary Archæological Institute of America; and Committee on Printing and Publication, Mr. F. W. Hodge, Ethnologist in Charge of Bureau of American Ethnology.

The sessions of the Congress will be held, due to the courtesy of the authorities of the Smithsonian Institution, in the new building of the

National Museum. The exact date for the meeting will be decided upon later, in accordance with the wishes of the majority of the delegates to the Congress, but the month will, in all probability, be September. Active preparations for the session, which promises to be one of the most important ever held by the Americanists, will be begun without delay.

A. Hrdlička, Secretary.

Washington, D. C.

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#### **BOOK REVIEWS**

#### ORIGIN AND ANTIQUITY OF MAN'

HIS very comprehensive work is the mature fruitage of studies by the author in varied lines of research during many years. His investigations of the Ice Age, the latest geologic period, and of its widespread records of primitive man, have extended through a third of a century. In two preceding works, The Ice Age in North America, published in 1889, revised and enlarged last year in its fifth edition, and Man and the Glacial Period, published in 1892, Professor Wright has dealt more elaborately with some phases of this subject; but its wide relationship to many fields of science, and especially inquiries concerning the creation of man and his evolution into diverse races and his advance to civilization, are here most fully presented.

The chapters in their order bear the following titles: I, Methods of Scientific Approach; II, The Historical Evidence; III, The Linguistic Argument; IV, Origin of the Races in Europe; V, The Origin and Antiquity of the American Indian; VI, Significance of the Glacial Epoch; VII, Man in the Glacial Epoch; VIII, Man and the Lava Beds of the Pacific Coast; IX, Remains of Glacial Man in Europe; X, Supposed Evidence of Tertiary Man; XI, Glacial Man in Central Asia; XII, The Physiological Argument; XIII, The Psychological Argument; XIV, The Biblical Scheme; XV, Summary and Con-

clusion.

Citations of previous writers, such as usually appear in foot-notes, and occasional additions, are comprised in an appendix of 32 pages. The most important addition, in 4 pages, with a plate illustration, is a notice of a very recent and mainly yet unpublished memoir by Prof. N. H. Winchell, based on the archæological collections of the Minnesota Historical Society, entitled *Implements deemed to be of Great Age from Study of the Patinated Surfaces*.

An ample index of 19 pages contains one of the very few typographical or clerical errors observed in this volume, where opinions of Louis Agassiz

are credited to his son.

<sup>&</sup>lt;sup>1</sup>Origin and Antiquity of Man. By G. Frederick Wright, D.D., LL.D., F.G.S.A. Pp. xxii, 547; with 6 maps and 36 other illustrations. \$2.00. Oberlin, Ohio: Bibliotheca Sacra Company. 1912.

Like many other anthropologists, Professor Wright thinks that the primeval home of the human species was in some part of the warm regions of the Old World. Without discussing the claims for the basin of the Euphrates and Tigris to be the cradle of man's origin, as indicated apparently by the Bible account of the Garden of Eden, he would place it farther east and north, where the arid plains of Turkestan in Central Asia receive fertility and a large population along their borders by reason of many streams fed from melting glaciers on the adjacent lofty mountain ranges.

The anthropoid ancestors of man in Pliocene and Miocene time, through probably a million years of gradual approach to the Pleistocene and present *Homo sapiens*, were doubtless more like man than like the apes. But fossil traces of the ancestral species definitely connecting man with his nearest animal relatives have not been found. *Pithecanthropus erectus*, discovered by Dr. Dubois in Java, associated with remains of a Pliocene fauna, is regarded by Wright, following Cope and Lydekker, as "entirely human."

All the geologic record of life, from the first appearance of its lowest forms, the author considers, in accordance with researches in geology, physics and astronomy, by Dana, Walcott, George H. Darwin, Tait, Newcomb, Young and others, to be no longer than a hundred million years, or perhaps even to be limited within a half or a quarter of that time. On such a scale the duration of the Glacial period, with its great complexity of advance, recession and readvance of the margins of the ice sheets, but too brief to permit important changes of the species making up the molluscan faunas, was probably less than a hundred thousand years, or perhaps, as estimated by Prestwich, only about 25,000 years.

The very remarkable recession of the Muir glacier within the last century, measured by 7 miles during the 20 years from 1886 to 1906, the evidence of the Glacial Lake Agassiz that the general departure of the North American ice-sheet was similarly rapid, the testimony of the Niagara falls and gorge as studied by Wright and Gilbert, the age of St. Anthony falls, estimated by Winchell, and the very scanty erosion of glacially striated rock surfaces exposed to weathering ever since the Ice Age, all demonstrate that the latest stage of our continental glaciation, when the great marginal moraines were formed, and the ensuing Postglacial period, have been short, together comprising probably about 10,000 years. A period 5 to 10 times as long may well have sufficed, as the author shows, for the accumulation and fluctuations of the ice-sheets, and for their erosion, transportation, and the deposition of the drift.

Preceding high elevation of the great areas that became covered by snow and ice is held to have been the chief cause of the Glacial climate. Conversely, under the vast ice load these areas at last sank mostly somewhat below their present levels, restoring a temperate climate, warm or hot in the summers, on the boundaries of the icefields, so that they were fast melted away.

While deep ice yet enveloped the north half of North America and northwestern Europe, the arts and wisdom of civilization in the Euphrates and Nile valleys, at the dawn of written history, had attained a very high

development. Nearly 10,000 years ago the races of mankind had reached the same distinctness and remarkable contrasts which they have since maintained, and some favored nations were even then almost the intel-

lectual equals of the foremost peoples of the present day.

How long was the period occupied by the creation and evolution of man from the ancestral common stock of man and the apes upward to the civilization and refinement of ancient Assyria and Egypt? The conclusion given by Professor Wright is that this marvelous advance may have been made during so brief a period as 8000 years of prehistoric time, and that the antiquity of our species "need not be more than 15,000 years." He thus implies that man's origin belonged to the later part of the Ice Age, a very surprising view, denying the supposed long duration of Palæolithic and Eolithic man in Europe.

Geology and archæology are very profoundly indebted to the author for his valuable studies set forth in this volume; but these sciences seem to many of their workers to require at least 10 times as great antiquity for man, placing the earliest records and evidences of his existence, in Java and in various parts of Europe and America, fully as long ago as the begin-

ning of the Ice Age.

WARREN UPHAM.

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#### THE FORMATION OF THE ALPHABET<sup>1</sup>

WENTY years ago the Phoenician derivation of the alphabet seemed well established, and indeed the facts discovered up to that time fitted in fairly well with the theory. Nevertheless, Dr. Peile, Isaac Taylor and others felt that the data at hand were insufficient to fully establish the Phoenician origin. The discoveries of the last few years bearing on the subject are such that the theory is undermined and our views must be revised, or, as Dr. Petrie says, "The standpoint of the older writers was thus much like an accurate map of an icefield, appearing like solid land, yet in which the more curious observers had already noticed many awkward cracks and unfathomed depths. The movements of the last 20 years have broken up the ice; and now the neat history, which began at 1000 B.C. in Phoenicia, is floating over a sea of unexpected conditions, and the new land which is described needs entirely fresh charting."

The fundamental principle in Dr. Petrie's theory is that "man is a signusing animal" and that he made and used signs long before pictographs. He claims that although pictographs were simplified until they became arbitrary marks or letters, "yet that is only a late degeneration, and can-

not be looked on as the primitive growth of linear signs"

 $<sup>^1</sup>$  The Formation of the Alphabet. By W. M. Flinders Petrie, LL.D, Ph.D. Quarto. Pp. iv, 20, 9 plates, 4 illustrations in the text. Postpaid.  $_5/8\frac{1}{2}$ . London: Macmillan Company. 1912.

The point of view presented by the author is that a systematic alphabet was not invented by a "single tribe or individual in a developed civilization," but, he continues, "On the contrary it appears that a wide body of signs had been gradually brought into use in primitive times for various purposes. These were interchanged by trade, and spread from land to land, until the less known and less useful signs were ousted by those in more general acceptance. Lastly a couple of dozen signs triumphed; these became common property to a group of trading communities, while the local survivals of other forms were gradually extinguished in isolated seclusion."

The course of development, according to Dr. Petrie, is first signs, especially property signs such as are found on pottery from prehistoric graves in Egypt. These arbitrary signs would later become attached to the maker as a name. In the next stage the mark would come to denote a word

"regardless of its meaning as a property sign."

"After that came another great wrench of thought, when the sign came to be attached to the sound, and not to the sense of its original form; and when it could be used for a word or a part of a word, like a mediaeval rebus. In the rebus this stage has been preserved with pictorial instead of arbitrary signs. It seems very probable that the rebus arose among people—such as the mediaeval masons—who could not write but could carve, as an intelligible way of marking property. In this system we have the actual stage of the shifting of signs from their inherent to their artificial meaning, following sound alone instead of sense."

Next the sign became purely syllabic and the "final analysis into bare elements of sound . . . . has been reached in the alphabets."

From this point of view the early signs were not letters and did not form an alphabet but a signary. In fact Dr. Petrie does not think that the alphabet stage was reached until about 1000 B.C.

In support of his theory Dr. Petrie introduces 3 folded plates giving 35 columns and 60 lines in all, in which the signs for different countries and ages can be examined and similarities and differences noted at a glance.

His conclusion is "that a wide-spread body of signs—or signary—must have been in more or less general use, and that the shorter alphabets

were selections from such a body."

Dr. Petrie develops the subject in more detail in chapters on *The Various Signaries; The Vowels and Labials; The Gutturals and Dentals; Liquids, Sibilants and Aphonics; The Order of the Alphabet;* and in an appendix, *Note on the Arabic Alphabet.* 

Two full page plates of fragments of Egyptian pottery bearing signs, and a number of plates and maps of the regions from which different signs

came add greatly to the interest and value of the book.

As with all of Dr. Petrie's books, the subject is presented in a very concise form and in such a clear style that the argument is easily followed even by the general reader. Dr. Petrie has opened up a new field, but he realizes that the last word has not yet been said, for the 60 lines of signs he reproduces do not exhaust the total number of signs in use in early times,

and "we are as yet," he says, "only on the opening of this great subject, and any day a basket full of broken sherds from some unknown town in Asia Minor or Mesopotamia may open a fresh chapter and show the extension of many signs hitherto scarcely recognized."

FREDERICK B. WRIGHT.

# 4 4 4

#### TROY; A STUDY IN HOMERIC GEOGRAPHY1

N HIS book on Troy, a Study in Homeric Geography, Dr. Leaf aims to test the tradition of the Trojan War by comparing the text of Homer with the natural conditions described or assumed in the Iliad. His studies, both first and second hand, of the whole field lead him to the conclusion that "the landscape of the Iliad is really the landscape of Hissarlik and that the descriptions of Homer are drawn from the knowledge of eye-witnesses," though the poet of the Iliad need not necessarily have been an eye-witness himself. There are some exaggerations, to be sure, but nevertheless the descriptions fit fairly well.

For the first 4 chapters, Introductory, The Landscape of Troy. The Ruins of Troy, Homer and Troy, the author claims no especial originality, but acknowledges his debt to his predecessors, especially to Dörpfeld and Schliemann. The last 4 chapters, The Troad, The Allies and the War, The Pelasgian Name, Sestos and Abydos, cover ground practically unbroken,

while pages 310-330 comprise his main conclusions.

In these last chapters Dr. Leaf takes the Catalogue of the Trojans found at the end of the second book of the *Iliad* and discusses it as a "sort of versified gazetteer of the Troad, and of some of the neighboring countries," his aim being "to bring the statements of Homer into relation with geographical facts, and to see what reliance can be placed upon the *Iliad* as the earliest European geographical document." A study of the towns mentioned brings him to the conclusion that the Catalogue agrees completely with the geographical facts of the time represented—not with the facts after the Greek colonization when the coast towns became all-important and the interior towns were little known. "It is," he declares, "a genuine attempt to give true information."

The importance of Troy, according to our author, lay in its control of trade routes owing to its command of the Hellespont. Because of that, Troy compelled the merchants to do their trading on the plains around the city—and took toll from them; hence the Trojan wealth. The radial lines of the Trojan allies as enumerated in the Catalogue lead straight to what were the chief routes of trade in the early days of Greek colonization. "The Catalogue of the Trojan allies, in fact, preserves the tradition of the chief peoples whom the Greeks met when they went to Troy for the annual

<sup>&</sup>lt;sup>1</sup> Troy, a Study in Homeric Geography. By Walter Leaf, Litt.D., Hon.D. Litt. Pp. xvi, 406, 6 maps; 26 full page illustrations, as well as illustrations in the text. \$3.50 net. London and New York: The Macmillan Company. 1912.

fair." The plan of the campaign in the *Iliad* is simply to cut off Troy's trade, its source of wealth, and its food supply. There is no actual investment of the city. In the end, it was the Greek colonization not the capture of the city which destroyed Troy. When the west took possession by colonization of both shores of the Hellespont, Troy could no longer block the passage and deflect trade to her plain.

Again and again Dr. Leaf reiterates that the *Iliad* stands the geographical test to which he has subjected it. The results of his work are best

put forth in his own words.

"The argument then is briefly this. Given the known data—the Hellespont an essential economic necessity to Greece, but blocked by a strong fort, and the expansion of Greece to the Euxine at the beginning of the historical period—there must have been a point at which that fort was taken by the Greeks. And it must have been taken in much the way which Homer describes, by a process of wearing down. A war of Trov therefore is a necessary deduction from purely geographical conditions, and the account of it in Homer agrees with all the probabilities of the case. And it must have taken place at the very point of expansion which is depicted in the Catalogue--when the Achaians had occupied Greece and stretched across the islands as far as Rhodes. Their next step must be to the mainland. They are faced by a hostile, or at least foreign, population along the whole western coast of Asia Minor. All geographical conditions point to the mouth of the Hellespont as the strategic point of attack; there they can not only win the trade which is their chief object. but they can strike a telling blow at all the peoples of the mainland, especially the most formidable of them, the Lykians. The whole situation described in the *Iliad* is absolutely in accord with the inferences which are to be drawn from geography on the one hand and the ruins of Hissarlik on the other.

"My conclusion is that there existed a real record of real events, and

that out of this the *Iliad* grew.

"It is at all events within the limits of possibility that men as well as tribes are real; that Agamemnon, Priam, Achilles, Hector, Odysseus are the names of men who fought under Hissarlik. . . . . I am

not sure that we need even be too incredulous about Helen.

"The ostensible cause of war is almost always some point of honor; the ultimate cause is, almost without exception, economic. Who can say if the abduction of some fair queen was not the last straw which broke the Achaians' patience, and determined them to set out on the expedition which they must long before have planned? While they were fighting for trade, they may well have believed themselves to be fighting to revenge an insult.

"It is clear that the Greeks saw in the capture of the Hellespont the critical point of national expansion the step which brought Greece out of the limits of little local tribes into the atmosphere of the large human world, and opened the career of colonization which made them the creators of modern Europe" (pp. 326-329).

HELEN M. WRIGHT.

#### **EDITORIAL NOTES**

ACROSS ARABIA.—M. Barclay Raunkiaer, under the auspices of the Royal Danish Geographical Society, has crossed unknown parts of Central Arabia. His full report will be waited with great interest.

ROCK TOMBS OF OCA.—Twenty-one rock-hewn tombs are reported from the Roman necropolis of Oca. There were evidences of both inhumation and cremation. Pieces of glass, earthen ware and cinerary urns were found. The date seems to be the I century.

RUINS NEAR STANLEY, NEW MEXICO.—From Stanley, New Mexico, come reports of the discovery of a stone building with 72 rooms. Human bones, pottery and other relics were found in the rooms, while at a little distance from the building were evidences of an irrigation system.

TROJAN VASES.—According to reports, the will of Mr. A. W. Terrell left his 3 Trojan vases to the Texas State University. These, the only Trojan vases in the United States, were presented to Mr. Terrell while he held the office of United States Minister to Turkey. It is supposed that the vases came from the ruins of Priam's palace.

NECROPOLIS OF HELIOPOLIS.—Interesting excavations have been carried on in the necropolis of Heliopolis—the intellectual center of Egypt for centuries. The burial places cut from the rocks were from 65 to 220 ft. deep. The removal of the sand which had drifted over them revealed mummies of human bodies and skeletons of sacred animals and birds as well as ibis eggs. A pillar decorated with the black bull Mnevis was uncovered suggesting the presence of further objects of great interest.

WORK ON THE ISLAND OF CRETE.—It is reported that an important result of the last summer's work on the island of Crete by the University of Pennsylvania's expedition was the discovery of scarabs dated 950 to 850 B.C. This would fix the date of the ancient town in the cemetery of which they were found and would indicate the time of the period of decline of the empire which flourished in Crete. Painted pottery, tripods, swords, vessels and ornaments in bronze and other objects of archæological interest were found.

ROMAN CAMP AT SEGEDUNUM, ENGLAND.—We note reports of interesting discoveries at Wallsend, upon the site of the Roman camp at Segedunum. Parts of the east rampart of the east gateway have been uncovered, and a wall of the north guard chamber within the east gateway. This will probably give the clew to determining the shape of the east rampart. Remains of a gravel road through the camp from east to west and of a road at right angles to it have been found as well as other walks.

ANOTHER CAST OF A MAN AT POMPEII.—To the casts of men and animals killed at Pompeii by the great eruption of Vesuvius a recent addition is that of a man who had evidently climbed a tree to escape. The limb then broke and fell with the man clinging to it. Eight silver coins from the period from Caesar to Titus and a copper coin were found as well as an iron finger ring holding a carnelian on which is engraved the sign of Capricorn between a star and a ship's rudder.

FEMALE SKELETON FROM SAKKARA.—Human remains are reported from Sakkara, Egypt, belonging to the period of the end of the II and beginning of the III dynasty, about 4000 B.C. Among them is a female skeleton wrapped in bandages. The cloth near the body was corroded, indicating probably that some material such as natron had been applied to the body to preserve it. If this be so, the use of this method of preservation of the body of the dead is older than has been supposed.

FRESCOES FOUND AT ROME.—It is reported that among the recent discoveries by Professor Boni on the Palatine is a series of frescoes illustrating the *Iliad*. Another fresco represents a figure gazing at a Greek temple resembling the Theseion at Athens.

Another important find was the base of an imperial throne in "Domitian's coronation room," as Boni calls it. Three steps of Egyptian granite lead to the throne. There was also found a Greek bas-relief which had been defaced and the back used for an Egyptian design of sphinxes and the serpent.

WORK AT OSTIA.—Much interesting work is reported from Ostia. Two main thoroughfares, the "decumanus" and the "cardo" have been uncovered and it is possible to wander through an ancient Roman city with no modern buildings to distract one's attention from the ruins. The "decumanus" led to the sea and was flanked by porticoes opening into shops or private houses. Some are in good condition and the walls well preserved.

Among the interesting discoveries is a piece of pavement found in the imperial palace. It dates back to the time of Nero and is of great archæological value as it proves that the pavement work usually known as Opus Alexandrium existed long before the time of Alexander Severus, after whom it was named. Such small finds as a terra cotta model of a camel's head and pieces of mother of pearl, the marble head of a woman and styluses for writing add a touch of reality to the ancient life of the city. There was also a full length figure, nearly complete, of a priestess—a gracious, matronly figure.

The theater, built of brick with stone facing, is less well preserved than the shops and houses of this seaport town. It stands close to the "decumanus" and bears its original form. Some of its columns, statues and mosaics are beautifully preserved. Several thousand people could be accommodated here. A large statue of Venus now in the Lateran Museum and the "Venus of the Sea" were found in the theater.

The firemen's barracks, partially excavated before, have been further uncovered. There were 2 fountains and a splendid entrance. A number of fragments of inscriptions were found inside, recording firemen who had received grants of public grain, all dating from the second half of the II century. The Firemen's Street (via dei Vigili) was also excavated. In this street a bath of 50 A.D. as well as a mosaic was found. The latter contains squares with shields, 4 of which bear allegorical representations of the provinces with which Ostia had most trade: Sicily as the 3-legged Trinacria; Egypt as the head of a woman and a crocodile; Africa, a woman's head covered by a leopard's skin; Spain, a woman's head encircled by an olive wreath. Near one of these shields is a man's head with wings representing the wind favorable to the trade of the particular region. In this street were found many water pipes.

In some tombs dating from the end of the republic, were discovered Cupids, sphinxes and other artistic objects made of bone. There was also the tomb of a soldier of the Praetorian Cohort, specially honored for

having died in the attempt to extinguish a fire.

HAWARA PORTRAIT AT UNIVERSITY OF PENNSYLVANIA.—The University of Pennsylvania received in October of this year one of the portraits which were found by Dr. Flinders Petrie at Hawara and described in the November-December, 1911, issue of Records of the Past. It is an oil painting on a wooden panel, representing a young woman, probably of high rank, dating from about the II century B.C.

HEAD FROM FAYUM.—Sir Gaston Maspero is by no means convinced that the head from the Fayum which Dr. Borchardt bought in Cairo 6 years ago and has just published is a protrait head of Queen Tiyi. He admits that this may be true, but calls attention to his former hypothesis that the head is modeled from a granddaughter or grandniece of the queen.

EXCAVATIONS IN THE BASILICA AEMILIA.—The south end of the nave of the Basilica Aemilia has been cleared. Three strata were found—a thin layer of ashes; a stratum of earth 3 ft. thick, with marble fragments of architectural members of the building lying upon it; the west wall of the nave which fell inward, probably in the VIII century. All of these indicated that the building was not restored after the fire in the V century with a row of red granite columns along the façade, but that the columns had some other use; and that it was not entirely destroyed by the fire but was abandoned until the wall collapsed.

MOSAIC FLOOR IN TAJURA.—In the *Times* (London) of August 17 it was reported that during some excavations for military purposes in the oasis of Tajura a mosiac floor was uncovered. The chief Archæological inspector in Tripoli says that it belongs to a temple of the Imperial Age. Further excavations disclosed remains of walls with mosaics and a Latin inscription.

PAPYRI OF THE GRÆCO-EGYPTIAN PERIOD.—According to reports, Robert de Rustafjaell found, during the summer, a number of papyri of the best Græco-Egyptian period. They are 12 in. wide, closely rolled, some as much as 4 in. in diameter. It is estimated that the largest is 50 ft. long—a record size. The writing is in good condition, but the rolls themselves are dry and fragile. They relate to interesting historical events and may prove of value in adding to our present knowledge of Egypt and possibly of Syria in the days of the Ptolemies.

VASE FOUND AT MAUMBURY RINGS.—On September 4 askeleton of a man of unusual stature was found during the excavations at Maumbury Rings near Dorchester. Near his head was a Romano-British vase in perfect condition. The excavators were able to get the vase, which was of black ware, out of the chalk without a flaw.

HUMAN REMAINS NEAR GULLANE, HADDINGTONSHIRE. —On September 8, Prof. A. Keith and Dr. E. Ewart presented to the British Association a paper on the discovery of human remains in a raised beach near Gullane, Haddingtonshire. They pointed out that "the interest of the find lay in the fact that in the same place there were cairns containing remains of the Iron Age, a grave belonging to the Bronze Age and the human remains now found belonging to an earlier period, which, in Dr. Ewart's opinion, represent a Neolithic people in Scotland almost identical with the Neolithic inhabitants of Switzerland. The exhibits included a number of flint and jasper instruments which had been collected in the vicinity of Gullane and human bones which showed the remarkable muscularity of a very powerful short race."

EARLY BRONZE AGE POTTERY FROM WALES.-During a visit of the Royal Commission on Ancient Monuments (Wales) to Downing Hall, at one time the home of the celebrated antiquary Pennant, the secretary of the Commission noticed an earthen pot differing from the Egyptian pottery surrounding it on one of the shelves. Upon examination, he found that it was a "perfect specimen of a prehistoric cinerary urn, the character of the ornamentation of which, with its ziz-zag lines and dots, left no doubt that it was a relic of the Early Bronze Age. In shape, though not in size, the urn is very like the famous urn found in the reputed grave of Bronwen the Fair on the banks of the Alaw, an Anglesey, a couple of centuries ago, which is now one of the most treasured objects in the British Museum's collection of prehistoric antiquities." Inside was a smaller urn, a rare specimen of the incense cup type, which contained an old letter saying that the urns had been found in a tumulus on a neighboring farm. These treasures will shortly be transferred to the Welsh National Museum at Cardiff.

EXCAVATIONS NEAR LLANDRINDOD WELLS.—Considerable work has been done recently on the site of the prætorium at Castell Collen, the Roman station on the banks of the River Ithon near Llandrindod

Wells. All has been explored except a portion of the Sacellum which has double walls divided by a packing of clay 2 ft. thick guarding it on 3 sides, probably to keep the chief room of the prætorium dry. Some carved mouldings and a number of inscribed stones were found. Several of the bricks bear the mark of dogs' feet and the finger prints of the workmen who handled them before they were burnt. Specimens of Samarian and Black or Upchurch ware of the II and III centuries were found as well as a number of bronze fibulae (one in the shape of a dolphin), several large bronze coins (2 of Antoninus Pius) and bronze ornaments in the form of bracelets. Stone implements such as a quern and mortar, an instrument resembling a pestle, a quoit-like stone and numerous slingstones were also dug up.

PROF. GARSTANG'S WORK AT MEROE.—With regard to the results of the last 3 seasons of excavation at Meroë, in the Sudan, Prof. Garstang says: "It now becomes clear that there are 3 main periods represented in the buildings which have been excavated. first is that of the original conception of the Royal City in the VII or VIII century B.C.—the age of Aspelut, Hor-ma-tileq and Mal negen. To this date belong the great buildings in stone—the walls of the city, the original portions of the Royal Palace, and of the audience chamber. In this age Egyptian motives in art, and probably in culture, were still predominant. The next period is distinguished by the supplanting, about the III century B.C., of Egyptian ideas by Greek; as witness a small cameo of galloping horses found last year and the semi-classical statues. In construction, solid stonework has given way to foundations of stone slabs and walls faced, at any rate, with red brick. The buildings of this age must include the Baths, the later Temple of Isis, and probably the small classical To this time belong nearly all the distinctive objects of pure Meroitic origin, such as the fine painted and stamped pottery, the glass and decorated tiles and so forth. The third phase is one of decadence, and, so far as it can be recognized at present, seems to be distinguished rather by Roman than by Greek ideas in art, but the buildings of the time are comparatively crude and lack distinction. In the middle of the IV century A.D., however, the city still maintained its importance."

Among the objects found last season, were a statue of a local Venus, of somewhat Hottentot-like proportions; a large reclining figure, probably representing some ancient king; a seated robed figure, holding a scroll; wonderfully minute glass mosaics which instead of being clamped in the usual way, were fused together when made; specimens of both Greek and Roman Samian pottery, which has enabled Prof. Garstang to fix the dates of several of the buildings in the city; decorated pottery vases; glazed

medallions; royal seals and ancient glass.

A low mound excavated proved to mark the site of the Baths. The excavation of the building is not yet completed but, in Prof. Garstang's words, "several of the chief rooms have been uncovered, including a local form of frigidarium, in the large swimming-tank and shower-bath, and a tepidarium with ornamental seats. . . . . The enclosing wall of the

whole building is fairly well defined by its facing of red brick, and the painted design upon its stuccoed surface, but there are several details which

still require illustration.

"Two flights of steps lead down into the *tepidarium*. Its 3 seats are disposed around the quarter of a circle, and their arms are conventional griffins carved in stone. There was also found, fallen on to one of the stairs, a winged sphinx of stone, with the body of a lion and the head of a bird. The seats are of familiar rounded shape, built into the thin dividing wall which follows their curve. Several fallen capitals and parts of engaged columns, stuccoed and painted, were found lying about in various

places but further details of its plan are still uncertain."

The swimming-bath has a tank  $6\frac{1}{2}$  ft. deep, and a flight of steps leading down to the bottom on the eastern side. The 6 water inlets on the south side are preserved. "The water-supply is found in an ingenious system of storage aqueducts coming from the south. These were built of red brick, with a cemented channel about 20 cm. in width, and 30 cm. in depth. They had practically no fall, until they approached the bath, where there was a gulley or pipe provided with a stopper; so that the canals having been already filled, . . . . . the stoppers could be withdrawn simultaneously and the water allowed to flow in a continuous cascade from the many openings into the tank."

HOUSE AND ITS OCCUPANTS FOUND AT POMPEII.—From Pompeii early in the past summer came reports of the discovery of "a large and apparently important house in an excellent state of preservation. The building belonged to one Obellius Fidmus, who seems to have perished with wife and family, for 6 skeletons were found in one of the inner rooms. The children's nursery has been found. On the walls are pictures of gladiators and horses scribbled by the children. The skeletons were found preserved in lava, and the authorities have decided that the room shall not be disturbed. A glass case is to be built round the relics."



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